

INFORMATION DISCLOSURE  
STATEMENT BY APPLICANT

Complete if Known

Application Number 09/825,925  
Filing Date 05 April 2001  
First Named Inventor Samuel RAHBAR  
Group Art Unit 1614  
Examiner Name Not Yet Assigned

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Sheet 1 of 5 Attorney Docket Number 1954-373

U.S. PATENT DOCUMENTS

Examiner Initials*	Cite No. <sup>1</sup>	U.S. Patent Document		Name of Patentee or Applicant of Cited Document	Date of Publication of Cited Document MM-DD-YYYY
		Number	Kind Code (if known)		
VB		5,272,176		Ulrich et al. <i>Class Subject</i> 514 399	12-21-1993
VB		5,661,139		Lankin et al. 860 34	08-26-1997

FOREIGN PATENT DOCUMENTS

Examiner Initials*	Cite No.	Foreign Patent Document			Name of Patentee of Applicant of Cited Document	Date of Publication of Cited Document MM-DD-YYYY	T <sup>6</sup>
		Office	Number	Kind Code (if known)			
VD		WO	95/31192		Thomas Jefferson University	11-23-1995	

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Signature

V. Balasubraman

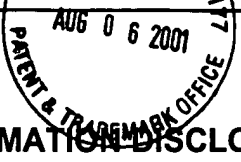
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<sup>1</sup>Unique citation designation number. <sup>2</sup>See attached Kinds of U.S. Patent Documents. <sup>3</sup>Enter Office that issued the document, by the two-letter code.

<sup>4</sup>For Japanese patent documents, the indication of the year of the reign of the Emperor must precede the serial number of the patent document. <sup>5</sup>Kind of document by the appropriate symbols as indicated on the document under WIPO Standard ST. 16 if possible. <sup>6</sup>Applicant is to place a check mark here if English language translation is attached. AB indicates that only an English language abstract is attached.

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**OTHER PRIOR ART - NON PATENT LITERATURE DOCUMENTS**

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V		Al-Abed, Y. et al. "Inhibition of advanced glycation endproduct formation by acetaldehyde: Role in the cardioprotective effect of ethanol", <i>Proc. Natl. Acad. Sci. USA</i> , Mar. 1999; 96:2385-2390	
B		Asif, M. et al. "An advanced glycation endproduct cross-link breaker can reverse age-related increases in myocardial stiffness", <i>PNAS</i> , Mar. 14, 2000; 97(6):2809-2813	
B		Boel, E. et al. "Diabetic Late Complications: Will Aldose Reductase Inhibitors or Inhibitors of Advanced Glycosylation Endproduct Formation Hold Promise?", <i>J. Diabetes and Its Complications</i> , 1995; 9:104-129	
B		Booth, A.A. et al. "Thiamine Pyrophosphate and Pyridoxamine Inhibit the Formation of Antigenic Advanced Glycation End-Products: Comparison with Aminoguanidine", <i>Biochem. Biophys. Res. Commun.</i> , 1996; 220:113-119	
B		Booth, A.A. et al. "In Vitro Kinetic Studies of Formation of Antigenic Advanced Glycation End Products (AGEs)", <i>Journal of Biological Chemistry</i> , Feb. 28, 1997; 272(9):5430-5437	
V		Calatayud J.J., "Favorable Effects of the Lipid-Lowering and Platelet Antiaggregant Plafibride on the Aging Process of Mice of the C57BL/6J Strain," <i>Math and Find Exptl Clin Pharmacol</i> , 1983; 5(10):707-714	
B	✓	Cameron, N.E. et al. "Effects of aminoguanidine on peripheral nerve function and polyol pathway metabolites in streptozotocin-diabetic rats", <i>Diabetologia</i> ; 1992; 35:946-950	
M	✓	Corbett, J.A. et al. "Aminoguanidine, a Novel Inhibitor of Nitric Oxide Formation, Prevents Diabetic Vascular Dysfunction", <i>Diabetes</i> , April 1992; 41:552-556	
B	✓	Cooper, M.E. et al., "The cross-link breaker, N-phenacylthiazolium bromide prevents vascular advanced glycation end-product accumulation," <i>Diabetologia</i> , 2000; 43:660-664	
M	✓	Durany, N. et al. "Investigations on oxidative stress and therapeutical implications in dementia", <i>Eur. Arch. Psychiatry Clin. Neurosci.</i> , 1999; 249:Suppl. 3 III/68-III/73	
M	✓	Hirsch, J. et al., "The reaction of some dicarbonyl sugars with aminoguanidine," <i>Carbohydrate Research</i> , 1992; 232:125-130	
V	✓	Jakus, V. et al. "Inhibition of Nonenzymatic Protein Glycation and Lipid Peroxidation by Drugs with Antioxidant Activity", <i>Life Sciences</i> , 1999; 65(18-19):1991-1993	

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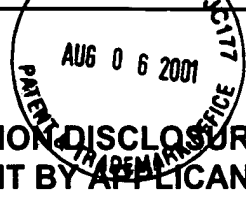
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VB	✓	Jyothirmayi, G.N. et al. "Effects of Metformin on Collagen Glycation and Diastolic Dysfunction in Diabetic Myocardium", <i>J. Cardiovasc. Pharmacol. Therapeut.</i> , 1998; 3(4):319-326			
VB	✓	Khalifah, R.G. "Amadorins: Novel Post-Amadori Inhibitors of Advanced Glycation Reactions", <i>Biochem. Biophys. Res. Commun.</i> , 1999; 257:251-258			
VB	✓	Kochakian, M. et al. "Chronic Dosing with Aminoguanidine and Novel Advanced Glycosylation End Product-Formation Inhibitors Ameliorates Cross-Linking of Tail Tendon Collagen and STZ-Induced Diabetic Rats", <i>Diabetes</i> , Dec. 1996; 45:1694-1700			
VB	✓	Malik, N.S. and Meek, K.M. "The Inhibition of Sugar-Induced Structural Alterations in Collagen by Aspirin and Other Compounds", <i>Biochem. Biophys. Res. Commun.</i> , 1994; 199(2):683-686			
VB	✓	Marques, C. et al. "Bendazac decreases <i>in vitro</i> glycation of human lens crystallins. Decrease of <i>in vitro</i> protein glycation by bendazac", <i>Documenta Ophthalmologica</i> , 1995; 90:395-404			
VB	✓	Menzel, E.J. et al. "Comparison of the effect of different inhibitors on the non-enzymatic glycation of rat tail tendons and bovine serum albumin", <i>Ann. Clin. Biochem.</i> , 1996; 33:241-248			
VB	✓	Miwa, I. et al. "Inhibition of Advanced Protein Glycation by 8-Quinolinecarboxylic Hydrazide", <i>Pharmacology</i> , 1996; 52:314-320			
VB	✓	Morimitsu, Y. et al. "Protein Glycation Inhibitors from Thyme ( <i>Thymus vulgaris</i> )", <i>Biosci. Biotech. Biochem.</i> , 1995; 59(11):2018-2021			
VB	✓	Münch, G. et al. "Influence of advanced glycation end-products and AGE-inhibitors on nucleation-dependent polymerization of $\beta$ -amyloid peptide", <i>Biochimica et Biophysica Acta</i> , 1997; 1360:17-29			
VB	✓	Münch, G. et al. "Advanced glycation endproducts in ageing and Alzheimer's disease", <i>Brain Research Reviews</i> , 1997; 23:134-143			
VB	✓	Nakamura, S. et al. "Progression of Nephropathy in Spontaneous Diabetic Rats is Prevented by OPB-9195, a Novel Inhibitor of Advanced Glycation", <i>Diabetes</i> , May 1997; 46:895-899			
VB	✓	Rahbar, S. and Nadler, J.L. "A new rapid method to detect inhibition of Amadori product generated by $\delta$ -gluconolactone", <i>Clinica Chimica Acta</i> , 1999; 287:123-130			
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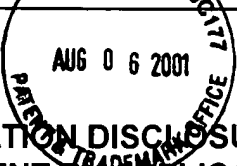
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W		Rahbar, S. et al. "Novel Inhibitors of Advanced Glycation Endproducts", <i>Biochem. Biophys. Res. Commun.</i> , 1999; 262:651-656			
W		Raj D.S.C., et al., "Advanced Glycation End Products: A Nephrologist's Perspective," <i>American Journal of Kidney Diseases</i> , March 2000; 35(3):365-380			
B		Ruggiero-Lopez, D. et al. "Reaction of Metformin with Dicarbonyl Compounds. Possible Implication in the Inhibition of Advanced Glycation End Product Formation", <i>Biochem. Pharmacology</i> , 1999; 58:1765-1773			
W		Ryan, M.E. et al. "Tetracyclines Inhibit Protein Glycation in Experimental Diabetes", <i>Adv. Dent. Res.</i> , Nov. 1998; 12:152-158			
B		Sensi, M. et al. "D-Lysine reduces the non-enzymatic glycation of proteins in experimental diabetes mellitus in rats", <i>Diabetologia</i> , 1993; 36:797-801			
W		Soulis, T. et al. "Relative contributions of advanced glycation and nitric oxide synthase inhibition to aminoguanidine-mediated renoprotection in diabetic rats", <i>Diabetologia</i> , 1997; 40:1141-1151			
W		Soulis, T. et al. "A novel inhibitor of advanced glycation end-product formation inhibits mesenteric vascular hypertrophy in experimental diabetes", <i>Diabetologia</i> 1999; 42:472-479			
W		Swamy-Mruthinti, S. et al. "Acetyl-L-Carnitine Decreases Glycation of Lens Proteins: in vitro Studies", <i>Exp. Eye Res.</i> , 1999; 69:109-115			
B		Taguchi, T. et al. "Inhibition of advanced protein glycation by a Schiff base between aminoguanidine and pyridoxal", <i>European Journal of Pharmacology</i> , 1999; 378:283-289			
W		Tanaka, Y. et al. "Effect of metformin on advanced glycation endproduct formation and peripheral nerve function in streptozotocin-induced diabetic rats", <i>European Journal of Pharmacology</i> , 1999; 376:17-22			
W		Thornalley, P.J. et al., "Rapid Hydrolysis and Slow $\alpha$ , $\beta$ -Dicarbonyl Cleavage of an Agent Proposed to Cleave Glucose-Derived Protein Cross-Links," <i>Biochemical Pharmacology</i> , 1999; 57:303-307.			
W		Tilton, R.G. et al. "Prevention of Diabetic Vascular Dysfunction by Guanidines. Inhibition of Nitric Oxide Synthase Versus Advanced Glycation End-Product Formation", <i>Diabetes</i> , Feb. 1993; 42:221-232			
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U		Tsuchida, K. et al. "Suppression of transforming growth factor beta and vascular endothelial growth factor in diabetic nephropathy in rats by a novel advanced glycation end product inhibitor, OPB-9195", <i>Diabetologia</i> , 1999; 42:579-588	
U		Ulrich, P. and Zhang, X. "Pharmacological reversal of advanced glycation end-product-mediated protein crosslinking", <i>Diabetologia</i> , 1997; 40:S157-S159	
U		van Boekel, M. et al., "Glycation of human serum albumin: inhibition by Diclofenac", <i>Biochimica et Biophysica Acta</i> , 1992; 1120:201-204	
U		Vasan, S. et al. "An agent cleaving glucose-derived protein crosslinks <i>in vitro</i> and <i>in vivo</i> ", <i>Nature</i> , July 18, 1996; 382:275-278	
U		Wolffenbittel, B. et al. "Breakers of advanced glycation end products restore large artery properties in experimental diabetes", <i>Proc. Natl. Acad. Sci. USA</i> , April 1998; 95:4630-4634	

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